CASES

OF

DISEASED BLADDER

AND

TESTICLE.

ILLUSTRATED WITH ETCHINGS.

BY

WILLIAM WADD, Surgeon.

London:

PRINTED FOR J. CALLOW, CROWN COURT, PRINCES STREET, SOHO;

BY SMITH AND DAVY, QUEEN STREET, SEVEN DIALS.

1815.

SOCIETY OF LONDON MEDICAL

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TO

SIR JAMES EARLE, F.R.S.

SURGEON EXTRAORDINARY TO THE KING;

SENIOR SURGEON TO

SAINT BARTHOLOMEW'S HOSPITAL,

&c. &c. &c.

IN GRATITUDE FOR MANY FAVOURS RECEIVED,

DURING TEN YEARS ATTENDANCE AT

THAT HOSPITAL,

AS HIS APPRENTICE AND PUPIL,

THIS WORK,

IS MOST RESPECTFULLY DEDICATED,

BY HIS

FAITHFUL, OBLIGED, AND OBEDIENT

HUMBLE SERVANT,

WILLIAM WADD.

Park Place, St. James's Street,
June 4, 1815.

PREFACE.

THE study of Surgery has been greatly facilitated by the introduction of Engravings to illustrate morbid changes. Preparations, wet or dry, however beautifully executed, are from the time of their completion gradually losing their value, by loss of colour, change of figure, and even from the very delicacy of their materials. Add to this, their utility is much lessened by the circumscribed spot, in which only they can be examined. In the circle of the theatre they relieve the lecturer, but arrive at many of the hearers, when the subject for which they were introduced is passed, and from that period can be only imperfectly recollected, if they are not entirely forgotten. Engravings, on the contrary, may be multiplied to any number; and whilst morbid preparations require a constant

interpreter, they are always accompanied with minute explanatory references.

It must however be admitted, that inaccuracy in the figure, or reference, may be productive of errors, of which the common artist, taught only to study effect, is a very imperfect judge. Hence the difficulty of procuring satisfactory anatomical representations, even from the ablest masters. Doctor Bailie and Sir Everard Home, have been very fortunate in the assistance of the ingenious conservator of the Hunterian Museum, "who is not less skilled in anatomy, than he is excellent in the art of making anatomical drawings;" but that gentleman's more important engagements are too numerous, to expect his services on every occasion.

The early habit of pencilling morbid appearances, of sufficient interest to deserve notice, has by degrees furnished the Author with a large collection of drawings. Of these, when in compliance with the wishes of his medical friends, he has been desirous of offering to the Public a selection of the most interesting, he has always been discouraged by the difficulties above mentioned. On this subject he had frequent conversations with his

friend Mr. Hills, whose philosophical pursuits and pre-eminent talents as an artist, are well known. This gentleman not only advised the Author to undertake what it would be difficult to explain, or correct in others, but as a further encouragement, offered his own instructions, to enable him at once to secure and multiply the productions of his pencil, by means of the etching needle. Such a proposal, from one who, unrivalled in the peculiar department of his art, has in the execution of a work representing the character of living animals, surpassed the productions of this or any other country, was eagerly adopted, and may serve as an apology for the attempt.

It was intended to have confined the work to diseases of the urinary organs. But the frequent affections of the testicle, by contiguity or sympathy with those parts, rendered the whole incompleat, without some notice of the diseases of those glands, and a reference to them produced the concluding chapter on Hernia Congenita. This addition was made, in order to mark a peculiarity in the figure of the testicle, not generally noticed, but which will be found to occur in most if not all herniæ of that description.

On a review of the sheets, the name of the late Mr. Hunter very frequently meets the eye. Though this was unintentional, it was also unavoidable; nor is it easy to conceive how others, who have gone over the same ground, can have escaped the same repeated introduction of that CLARUM ET VENERABILE NOMEN.

DISEASES OF THE BLADDER

AND

ITS APPENDAGES.

DISEASES of the urinary organs are among the most distressing of those which do not necessarily shorten life. The complicated structure of the male organs, readily accounts for this, and renders a minute attention to every part, their respective functions, and the causes by which they are interrupted, of the utmost importance. Yet Mr. Hunter is the first, and almost the only person who has given us a rational and systematic view, of the various changes from which difficulty in performing a necessary function, embitters the life of so many, from the middle period to its termination. His remarks, though invaluable, were only intended as an appendage to his history of a disease, with the consequences of which, most complaints in these parts, were, till his time confounded. They are consequently short, but were found quite sufficient for

most practical purposes, till Sir Everard Home introduced, as an almost universal remedy, the caustic, which that great master had reserved for the most desperate cases. The application of a general remedy, implied an uniformity in the cause of the disease, and Sir Everard's book consisted only of histories of cures, without due attention to that arrangement, which formed a new epoch, in the study of these complicated complaints. It ought, however, in justice to be remarked, that Sir Everard, in his later publication, appears to have lost much of his former partiality, for severe and uncertain remedies.

Mr. Hunter has also given us a perfect and plain description of the gradual enlargement of the prostate gland, in many subjects at an advanced period of life. It is not easy to conceive, what should have induced his relation, pupil, and successor, to consider a diseased enlargement as a natural formation—at a time when, as M. Condorcet remarks, Anatomy has arrived at its acmè, "when every thing which the eye of the observer, assisted by the microscope, has been able to discover, is already ascertained"—could it be believed that a part should have been overlooked by all former anatomists in a gland so often and so minutely examined. If the high authority of his master, and I may add, almost the only master acknowledged in the present day, was insufficient, the candid report of his own pupil, might have convinced Sir Everard of his too hasty conclusion. Happily this

error has led to no severity of practice, nor is it likely, or even that the authority of Mr. Hunter's successor should induce its adoption in our anatomical schools.

In the description of the diseases of this gland, I have therefore retained Mr. Hunter's, and the established doctrine, concerning its original form and subsequent changes.

CALCULI of the prostate gland, are, as Dr. Baillie remarks, somewhat rare. On that account they are probably too little suspected. It has however occurred to me to examine a few cases of this description.

PLATE I.

Specimens of Calculi in the Ducts and Substance of the Prostate Gland.

THE upper drawing represents the neck, and part of the bladder of a man about forty years of age, who died of retention of urine (1799). The prostate gland was not enlarged, but contained numerous small stones.

The lower drawing is a section of a large prostate, belonging to a subject about seventy years of age, containing many angular calculi.

The first was a private patient of one of the physicians of St. Bartholomew's hospital, who only saw him a few hours before his death, when the pain of the first stage of retention of urine had subsided. The bladder contained two quarts of water, and the kidnies and ureters were loaded with urine.

PLATE II.

REPRESENTS an enlargement of the prostate gland, with a calculus fixed to the surface. Taken from a man sixty-three years of age.

The lower drawing exhibits the neck of the bladder, with an enlargement of the verumontanum. The subject aged fifty-two.

In both these cases there was a similarity of symptoms; each of them had passed pieces of gravel, had constant irritation at the neck of the bladder, which admitted of no alleviation from the usual remedies; and in neither case could the catheter be passed into the bladder.

It should be observed, that the disease of the verumontanum, was accompanied with an enlargement of the spermatic process of the testis, hydrocele of the tunica vaginalis, &c.; which furnished the drawing of plate XIII.

PLATE III.

This etching represents a considerable enlargement of the prostate, with a portion of it in a state of ulceration, projecting into the bladder, and closing the upper orifice of the urethra. It was taken from a gentleman about seventy years of age, a patient of the late Mr. Consett's, whose urine for the last twelve months of his life, was constantly tinged with blood, with an occasional bleeding from the urethra, probably from the ulcerated prostate.

PLATE IV.

CASE.

A GENTLEMAN, seventy-five years of age, had a complaint in his bladder for twelve years, which through delicacy he concealed from his friends. Though at times his sufferings confined him for weeks together, he endured his miseries silently, till within six months of his death, when he sent for an apothecary on account of an unusual pain in the rectum, attended with great difficulty in voiding the fæces. To this person he disclosed his secret.

He died in May 1799, and was opened in the presence of Sir James Earle and Sir Everard Home, who were both consulted a short time only before his death. Plate IV. is a representation of the bladder.

The muscular coats had acquired great strength and unusual thickness; the internal membrane formed sacculi, many of which contained small stones, and on the left side, just above the ureter, was a large pouch containing several pieces of whitish calculus. The ureters were much enlarged as they approached the kidney. Their entrance into the bladder, is marked by a bougie passed through both. The latteral lobes of the prostate gland, as they are called by Sir Everard Home, were much increased in size, particularly the left, which was slightly

ulcerated, giving a curve to the passage and the verumontanum, by which the introduction of the catheter, must have been an operation of difficulty. The nipple-like process in the centre above, or middle lobe of Sir Everard Home, must have proved a considerable impediment to the passage of the urine. Yet the patient had accomplished that necessary process for several years, without any artificial assistance. Does this power of accommodating itself strengthen Sir Everard's opinion concerning the original formation of that process or lobe? Between the posterior surface of the prostate, and that part of the bladder in contact with the rectum, a large abscess was formed, which so aggravated the symptoms, as to terminate existence.

It has been very justly remarked by Sir Everard Home, that the left side, or what he designates the left lateral lobe, increases more rapidly than the right, and that in some cases it projects into the cavity of the bladder, as much as the middle lobe. Some authors have noticed the same occurrence in the testes, and that hydroceles, and other diseases, are found more frequently in the left than in the right testicle.

PLATE V.

This etching represents a very considerable enlargement of the prostate gland, and thickened bladder, the surface is covered with coagula.

The patient was sixty-three years of age, and had been nearly twenty years afflicted, with difficulty in making water. He applied to me in 1804, under a supposition that his complaints arose from strictures; the examination of the case however proved the seat of the disease was wholly confined to the bladder and prostate. He was by trade a stone-mason; but had not been able to work for several months, owing to his infirm state. On hearing his history, it appeared that his miseries had been much aggravated by large doses of gin and water, which a brother mason had recommended to "force his water;" a practice in daily use among the labouring class; and when they have once taken to it, as a facetious author observes, it is no uncommon thing for them to like the disease for the sake of the remedy. A more deplorable condition can scarcely be conceived. He had a constant irritation at the neck of the bladder, accompanied with a burning pain in the glans penis, a frequent discharge of urine, which sometimes flowed involuntarily by day, and constantly during the night. Hence the skin of the scrotum was so much inflamed,

as to render the least motion difficult and painful, and he was very feverish, with head-ach, and his stomach rejected food.

The urgency of his symptoms being relieved by means of fomentations, the warm bath, anodyne clysters, &c.; the case appeared likely to be served by the vesicæ lotura. Though the prostate gland was evidently enlarged, the catheter could be passed, with some difficulty. The first time I injected the bladder, it would not admit more than half an ounce of warm water, which was almost instantly expelled. The next attempt, two days afterwards, was attended with no better success, and by a daily repetition, at the end of a fortnight, nearly an ounce remained for five minutes. By this time, and by the means mentioned above, the general irritation had abated, and the state of health was improved; but the irritability of the bladder being still very distressing, the injection was persisted in every third day. After pursuing this plan, in addition to general remedies, for six weeks, he was so much better, as to commence his usual occupation; and soon ceased to require my assistance.

I saw nothing of him for nearly two years, when he came again with the parts in as miserable a state as before, and the constitution greatly impaired. He had returned to his favorite remedy, and now had the odour,

and jaundiced appearance of a dram-drinker. The former means were resorted to, with some temporary relief; but the vesicæ lotura could not be repeated, as he could not bear the catheter to be passed. After a few weeks he died.

CASE.

Mr. ——— about fifty years of age, had for many years laboured under a difficulty of making water, insomuch that latterly he could not pass any without first introducing a bougie, and sometimes a catheter. In July 1807, he applied to me on account of a purulent sediment, which gave him great uneasiness, as it was accompanied with a perpetual irritation to make water. These symptoms succeeded an illness, which had confined him to his room three weeks, and which had been attributed to exposure to a heavy rain. He was still under the care of a physician, and his object in calling on me was to know my opinion of the vesicæ lotura; I saw no objection to it, yet urged the use of some preparatory means. But he was impatient of any delay. I was prevailed on to return home with him, and injected about an ounce and half of warm water into the bladder, which remained only a minute. He was much pleased at the operation, and although it was not to be expected that the first time should make any alteration in his feelings, yet such was his good opinion of it, that he

seemed determined to believe it had, and expressed his firm confidence in the result. The next day he wished to try if he could do it himself, and in my presence succeeded. I saw him three or four times; but as he chose to proceed in his own way, did not interfere afterwards. In about two months, he called to tell me that he was better than he had been for many years, entirely owing to the injecting the bladder with warm water, which he had done frequently three times a day, it being very little more trouble, than introducing the instrument to draw off his water, which he still remained under the necessity of doing, though with comparative ease. He informed me, that the purulent sediment, which gave him so much concern, began to diminish before the end of a week, and at the end of a month had entirely ceased, without the aid of any internal medicines, or any other application than vesicæ lotura.

These were the two first cases in which I had any experience of the benefits of the vesicæ lotura, and I have seen so much relief afforded by it since, that I cannot but express my surprise that it is not more resorted to by practitioners. During the many years I was at St. Bartholomew's I never saw it applied once, nor do I believe it to be the practice of the public hospitals. Yet experience authorizes me in saying, that not only a great variety of injections may be thrown into the bladder with safety and advantage; but I have known many cases,

where in my opinion life could not have been sustained without it.

Mr. Jesse Foot, in his account of the vesicæ lotura, refers us to Le Dran for the introduction of the practice. Before him however, we find Dalechamps, in his Treatise on Surgery, published in Paris in 1610, expressly describing the mode of applying injections for ulceration of the bladder, &c. Chap. LIX. is " La maniere de sonder et faire injection en la vescie."

In the year 1745, at the request of Dr. Whytt, the bladder was injected by Mr. Cambel, who complains much of the difficulty of doing it, for want of proper instruments, and recommends a plan somewhat similar to Dalechamps; a short ivory pipe, with a sheep's bladder attached to the end of it. All these difficulties are happily removed by the modern apparatus.

PLATE VI.

Exhibits a remarkable specimen of the thickness and contraction of the bladder, caused by strictures of the urethra. In this case, the whole impediment to the free exit of the urine was in the urethra. It will be seen, by the external appearance, that the prostate is not unusually large. Since making the drawing I have opened and found it perfectly natural in size, but of a firmer texture than common. This is also a proof that this effect may be produced in a shorter space of time, and at an earlier period of life, than is usually supposed; the patient being thirty-eight years of age, and the strictures not suspected till four years previous to his death. Was it such an extraordinarily thick bladder, that induced Dr. Albrecht, professor of medicine at Erford, to suppose the bladder of a strong man may be divided into six coats?

PLATE VII.

CASE.

In November, 1811, a man in the employ of a friend of mine, was sent to me from the country, to be searched for the stone, with which it was supposed he had been afflicted many years. He was near seventy years of age; very much emaciated; his urine constantly dripping from him; and, in addition to this, he had a disorder in his bowels, for which various medicines had been prescribed without effect. On examining him, it was very evident that the prostate was much enlarged, and from the pain the introduction of the finger into the rectum produced, there could be no doubt that the latter was greatly diseased also. To search him for the stone, under these circumstances, would have been only a cruel experiment, especially as there were indications of dissolution, that seemed likely to soon put an end to any doubts, as to the true nature of his complaints. He recovered a little after the fatigue of the journey, but died before he had been in town a fortnight.

On opening him, no stone was found in his bladder, but the prostate was the largest and the most diseased I have ever met with. The left side was in a state of suppuration, and from the pressure on the other side, and the general mechanism of the parts, it seemed astonish-

ing that the urine should have found any channel by which it escaped.

PLATE VIII.

Represents a lateral section of the bladder, shewing an enlarged and diseased prostate, with ulceration.

The subject was about sixty-five years of age, had strictures, and fistulæ in perinæo; but the urethra was sufficiently open to allow the greater quantity of the urine to pass off that way, a part only coming through the fistulæ. He was very subject to the gout, and occasionally during a fit, would be seized with strangury and retention of urine, which, notwithstanding the diseased state of the prostate, could always be relieved by means of a small gum catheter. His death was occasioned by an accident.

That gout sometimes induces a disordered action of the urethra and bladder, is generally admitted, and the following cases seem to confirm it. The first was in a gentleman of most temperate and regular habits, who till that time, never had a complaint of any kind in the urethra, or any of the urinary organs.

CASE.

A gentleman, about sixty years of age, of a gouty habit, in the summer of 1812, went to Leamington for

the benefit of the mineral waters. At this time, the gout was flying about him. On his return home, he found himself improved in general health, but for the first time in his life, troubled with pain in making water, which he did very frequently, in small quantities, sometimes tinged with blood, and always accompanied with a sensation of burning, and smarting through the urethra. These symptoms were so much increased by exercise, that he was obliged to relinquish riding on horseback, and with difficulty came to town in his carriage, though the distance was not more than twenty miles. After considering all the circumstances of the case, and making every necessary examination, I was led to think that his complaints arose solely from irritation of the bladder. Mr. Cline was also consulted, and was of the same opinion. Shortly after this he was introduced by some of his neighbours to a surgeon of respectability, who pronounced his disease to be a stone in the bladder, and recommended lythotomy as the only cure. Happily this was deferred, and I had afterwards the pleasure of seeing him perfectly well, without any operation. He continues in health at this time (Feb. 22, 1815.)

CASE.

A gentleman, about sixty-five years of age, under circumstances very similar to the last case, was advised by his physician to visit Cheltenham. He had never been

troubled with any disease of the urethra, but was afflicted with what was termed the " wandering gout." After drinking the waters a fortnight, he was seized with a severe fit of the gout in both feet, and on the third day he found a difficulty in making water; what he made was very thick, and gave him exquisite pain. These symptoms continued unabated upwards of a week, and in a less degree for nearly a month. When he came to town, at the end of nine weeks, the pain had left him, and the urine was of its natural colour, but the irritation to void it was incessant.

It may however be doubted in these cases, whether the irritation might not in some measure be attributed to the stimulus of the waters. I have frequently known persons with strictures, under the necessity of discontinuing the use of medicinal springs.

PLATE IX.

REPRESENTS a thickened bladder, with a pouch formed by the inner membrane, in which were several small calculi. The ureters are enlarged, as well as the prostate and verumontanum.

The patient was sixty years of age, and for the last four years of his life could not void his urine without the aid of the catheter; which, latterly, required him to leave his bed seven, eight, and even nine times, in the course of the night. He kept some pieces of card, marked to No. 12, one of which he always placed upon his table when he drew off the water, by which, in the morning, he knew the number of times, and the intervals, as the number on the card expressed the hour. My introduction to this gentleman, was on account of a retention of urine in 1803, after he had been under the care of a surgeon for strictures in the urethra, and had submitted to the caustic upwards of ninety times. He was in great distress, from the apprehension that a catheter could not be passed; and, after hearing his history, I expected his fears would be realized. As his bladder was very tense, and could easily be felt above the pubes, I tried the smallest catheter I had with me, that no time might be lost, but without success. He was then put into the warm bath, whilst I went home for smaller instruments. One of these

was with much difficulty introduced into the bladder, and, to the great joy and relief of the patient, five pints of high coloured urine were drawn off. The urine had been voided with great difficulty and straining. It might be presumed, the powers of the bladder would not be improved by this distention; and it was nearly three months before that viscus had sufficient power of contraction to empty itself without the catheter. He recovered, however, so far as to travel a journey of two hundred miles; but in a very few months, found himself obliged to resort to the smallest sized elastic-gum catheter, which he generally passed without the stilet, and continued to use till his death.

In the Medical Commentaries, Vol. XVI. is the account of a case, where sixteen pounds two ounces were taken away by the catheter. I have heard of even larger quantities; but these five pints are the most I ever recollect to have taken away. There were several strictures in the urethra, and one at the membranous part.

Surgeons are divided in opinion as to the best mode of puncturing the bladder. I have seen the operation performed several times, and am decidedly in favor of puncturing through the rectum: had there been a necessity, it might have been easily accomplished in this instance. It has occurred to me only twice, to perform the operation this way. On both occasions I found no difficulty in introducing the Pouteau-trochar into the blad-

der through the rectum. One case terminated fatally; but more from other circumstances, and from too long a delay, than from any want of efficiency in the operation; which fully answered the intention of procuring and maintaining an exit for the urine.

Where the retention is occasioned by stricture not more than two or three inches from the orifice, the urine may be evacuated by puncturing the urethra. I lately had a case, where at every attempt to expel the urine, the urethra became visibly distended in the perinæum. An opening made with a lancet, relieved the urgency of the symptoms, after the warm bath and every other remedy had been tried in vain. I could not introduce any instrument; yet the contents of the bladder passed out, and the part healed very well, notwithstanding some of the urine escaped into the cellular membrane.

PLATE X.

The malignancy of some cancerous appearances, produced by common irritation, is here shewn by the state of the external parts, in a case where the urine had long ceased to pass by the urethra. A large mass of fungus covered the whole nates. In the perinæum, scrotum, and groins, were numerous fistulæ, through which the urine passed in all directions. It was one of the most distressing cases I ever witnessed. The pain and misery the patient suffered, during the last month of his life, were beyond the relief of opiates; and the excessive discharge, baffled every effort of his attendants to keep his person in a condition to be approached. Of the progress of the case, I know very little, not having seen it till within a few weeks before death; but, I was informed that these sufferings closed a life of the most abandoned profligacy. " C'etoit un de ces vieux garcons qui ont été fort libertins dans leurs jeunesse, et qui ne sont guère plus sage dans une âge plus avancé."

I lately attended a Gentleman, about forty-five years of age, with Mr. Ogle and Dr. Hooper, under very similar circumstances, where the whole of the urine passed the centre of cancerous fungi.

PLATE XI.

Calculi passed by the urethra.

The lowest on the plate, and the largest of the four, was passed by a middle-aged female, without any pain or inconvenience; while the smallest gave infinite misery, and was extracted from the urethra of a man, after two days of ineffectual exertions. The small ones are the size usually passed by the male subject. But the angular ragged calculus, at the upper part of the plate, was taken from the urethra, under the following circumstances.

CASE.

A GENTLEMAN, about fifty years of age, subject to the gravel and dysuria, was suddenly seized with a retention of urine, whilst on a journey to Brighton. He stopped his carriage to use the urinal, which he constantly carried with him when he travelled, but his efforts were ineffectual. Under these circumstances, without proceeding any further, he sent for me. I found him in great agony, and from the description of his feelings, had little doubt that a stone was fixed in the neck of the bladder. With a view of moving it, I passed a full-sized bougie, which went no farther than the prostate, and while in contact with the stone gave so much pain, as to render the return

of it into the bladder impossible. On withdrawing the bougie, the patient was sensible of a change in the position of the calculus, and it could now be distinctly felt in the perinæum. The bougie was introduced again very gently three times, without any alteration in the situation of the stone, on which the patient entreated I would cut it out. As there was no immediate necessity for such an operation, I hoped to succeed in getting it away without any incision into the urethra. In the course of a few hours, however, his pain was so great, that I made an incision in the perinæum, and with very little difficulty extracted the stone. The pain he suffered on this occasion, made him very desirous of following any plan that might be likely to prevent the recurrence of it; and by the advice of his physician, he left off wine, took small doses of magnesia, and has been two years without any of the symptoms he formerly complained of.

As a matter of curiosity, I have given the outline of the two largest calculi ever known to have been found in the human bladder, in this country. One of them is at Cambridge, the other is preserved in the Museum of the College of Surgeons. The former was taken from Alderman Sir Thomas Adams, who died at the advanced age of eighty-two, it weighed twenty-five ounces; the latter from Sir Walter Ogilvie, weighed forty-four ounces, filled the whole bladder, and is expressed by the dotted line.

In the Ecole de Medecine at Paris, they have one larger than these, weighing fifty-one ounces, six inches long, and one French foot in circumference.

The case of Sir Walter Ogilvie is very curious, and is related by Sir James Earle in the Philosophical Transactions, 1809. Notwithstanding the enormous size of the stone, an attempt was made to extract it, and as much as filled a tea-cup was taken away. The patient lived ten days after the operation.

PLATE XII.

Represents an enlarged pelvis of a kidney, injected with wax, taken from a man about fifty years of age, who died of disease in the other kidney, which on dissection was found to be entirely destroyed. Notwithstanding the secretion of urine, for some time before his death, must have been carried on by one kidney only, yet there never was any diminution of the quantity.

In the early stage of his complaints, he passed many pieces of fleshy substance, which in colour resembled portions of kidney: and in the bladder was found a similar substance, the size and appearance of which, is drawn on the lower part of the plate.

DISEASES OF THE TESTICLE.

HAVING said thus much on the diseases of the bladder and prostate gland, I shall add a few cases of diseased testicle, commencing with one which appeared to arise from sympathy with the urethra.

The sympathy of these parts could not escape the notice of Monro or Pott; but Mr. Hunter was the first to reduce the doctrine of sympathy to any certain laws. We are since that time indebted to Mr. Abernethy for some valuable observations on the reciprocal connection between the diseases of these parts, which have latterly been illustrated by the new theories of the late Mr. Ramsden.

The following case, with annexed etching, affords an example of disease from sympathy, by no means uncommon.

PLATE XIII.

The tunica vaginalis testis laid open, shewing an enlargement of the spermatic process, and that state of the testicle lately denominated hydro-sclerocele.

This case is referred to in page 7, where the neck of the bladder is described.

Not being accompanied with much pain, the disease of the testicle was always disregarded by the patient, for the more grievous complaints of the bladder, and urethra, which latter was in so irritable a state, as to render the introduction of the bougie too painful to be repeated more than three or four times. Latterly the patient would attend to no proposal from his surgeon, to relieve by the catheter the most urgent distresses from the retention of urine; it is impossible therefore to know whether the testicle might have been cured by the removal of the diseases of the urethra.

PLATE XIV.

Section of a testicle, enlarged and indurated, with a fungus arising from the body of the glandular substance. According to the patient's account, this was the consequence of hernia humoralis. Fourteen months before I first saw him he had a violent gonorrhœa, to relieve which he had imprudently injected a solution of white vitriol. This caused an almost instantaneous swelling of the testicle, and confined him to bed for a month; when, to use his own term, it burst, and a fungus, like a small mushroom, sprung up. When he applied to me the testicle was in an indolent state, but very large and hard. On examining the urethra, strictures were discovered, with a very irritable urethra. As this occurred at the time Mr. Ramsden's book made its appearance, I was induced to see what effect the treatment of the urethra would produce. The testicle, in the course of five weeks, was reduced to the state here exhibited, which was one half its former size. The fungus was not in the least diminished. It was my intention to have destroyed it by caustic, when the man was suddenly seized with a fit of coughing, and died from the rupture of a blood-vessel in the lungs. The case, however, afforded me satisfactory proof of the efficacy of this mode of treating such complicated diseases, and I have since pursued it with success.

PLATE XV.

FUNGUS from the surface of the testis, for which no other cause could be discovered but irritation in the urethra.

The circumstances of the case were briefly these.—The patient, a middle aged man, accustomed to free habits of living, had been twice under my care for venereal complaints, and previously, at different times, under the necessity of applying to an eminent surgeon in Dublin for the cure of gonorrhœa. In August 1813 he called to ask my advice for a disease of his testicle, and shewed me a fungus excrescence which projected from the upper part of it. The testicle was considerably enlarged, as far as could be ascertained by comparison with the other, which, though healthy, was much smaller than the medium size of that gland in most other men.

In the course of my acquaintance with him, he had frequently mentioned a difficulty in voiding his urine, and his intention of having the urethra examined; I had therefore no hesitation in proposing it to him under these circumstances, and stated the possibility that all his complaints might arise from the irritation of the urethra.

On passing a bougie, the urethra proved so extremely

irritable at five inches from the orifice, that he requested to have it immediately withdrawn; this was done, and it was not till nearly a week afterwards that he consented to a repetition of it.

After a second trial, he could bear the daily introduction of the bougie, which, at the end of a month, was accomplished with very little inconvenience or pain. From this period a visible amendment took place in the testicle; I applied a ligature on the fungus, which sloughed off in a few days, and the parts readily healed.

PLATE XVI.

Sclerocele, or hardened enlargement of the testes, with fungus, which, as in the preceding case, seemed dependant on irritation of the urethra.

This patient had also an irritable urethra and strictures. From the fungus of the testis there was a considerable secretion, which has been supposed, in some instances, to arise from the surface of the tunica vaginalis, and was probably so in this. The fungus was removed by ligature; but re-appearing, the application of caustic was resorted to with success, but not till after the testicle had been considerably reduced in size during the treatment of an irritable urethra, and the cure of the stricture by the use of bougies. After this, only the hardness remained in the testicle, which, by the aid of gentle mercurial friction on the surface, was in the course of a few weeks restored to its natural state.

HYDROCELE.

WHATEVER difference of opinion may exist as to the principle on which the injection effects the cure of the hydrocele, there can be none as to its superiority over all other operations. The universality of its adoption, the facility with which it is performed, and the comparatively slight suffering of the patient, completely justifies the epithet it has received from Mr. Ramsden, who calls it "one of the most perfect surgical operations."

Whilst I had the honour of visiting with Sir James Earle, there was scarcely an operation of any kind performed by him, at which I was not present; and as to Sir James we owe the fortunate revival of this important operation, with its present improvement, it will be supposed that the cure of the hydrocele by the injecting the tunica vaginalis testis, made a very considerable part of his practice, and gave me an opportunity of seeing it under every form. In some cases after caustic, seton, incision,

external applications, and other operations have failed, and even where the injection had been previously tried by others less acquainted with the practice, he was fortunate enough to succeed.

The only instances of failure were two cases, in which an attempt was made at a further improvement in the operation; and a third wherein no irritation was produced, in consequence, as it was supposed at the time, of the servants having diluted the wine. Each of these were cured by a second operation shortly afterwards. Whether even this was necessary cannot now be ascertained, but is by no means certain.

" The proper object," says Sir James Earle, " of all operations for the radical cure of the hydrocele, is to produce such an adhesion of the distended vaginal coat of the testis with the gland, or such a consolidation of contiguous parts, as shall annihilate the cavity, in which the water constituting this disease, is contained." The same is Mr. Pott's language. " The cure is accomplished merely by the coalescence of the tunica vaginalis with the tunica albuginea;" and Mr. Sharp, in his Critical Enquiry, tells us that, " upon examination of several hydroceles after cure, it appeared evidently it was wrought by an universal adhesion of the testicle to the tunica vaginalis." Such, I believe, were the sentiments of every surgeon of eminence,

till Mr. Ramsden ventured to dissent from theestablished doctrine; asserting that the obliteration of the cavity of the tunica vaginalis testis, was not essential to the cure, and that it did not happen unless the curative process had been carried to unnecessary severity

Among my notes, is a memorandum which very much confirms Mr. Ramsden's opinions. A gentleman underwent the operation in May, 1799. He left town at the end of June. The beginning of July he stated by letter, that the hydrocele had returned as large as before the operation, and in the middle of the next month, he wrote word that it had entirely disappeared. The operation had therefore excited a new action in the parts, and though the effusion of fluid had returned, yet the absorbents had recovered their function.

That adhesion takes place between the tunica vaginalis and testis, where there has been a certain degree of inflammation, has been repeatedly demonstrated; and that it is the general effect of the usual mode of injection; but if the cure can be accomplished by less irritation, and without any change in the parts from their original formation, many might be inclined to undergo it, who would not be willing to hazard an operation under any other circumstances.

Mr. Ramsden has not confirmed his theory by dissec-

tion; but brings abundant proof of transparency in the scrotum after the operation, and on that fact its validity chiefly rests. He attached great importance to the ascertaining the transparency of hydrocele, and in all cases made it his first object of enquiry, thinking that the surgeon who neglected this "grand characteristic," gratified his vanity at the risk of his patient's security.

The usual injection is two parts wine to one of water, or if the tunics are thin, the testicle enlarged, or any circumstance requiring caution, it is made of equal parts, wine and water. Even the latter proportion, is sometimes productive of considerable pain and tumefaction.

With a view of following Mr. Ramsden's plan of curing by only exciting a new action, with as little pain as possible, I have so lessened the quantity of wine, that the irritation produced has been such as not to detain the patient at home, after the day on which it was used, and I am inclined to think that very little irritation of the sacculus is sufficient for the cure of most hydroceles, that do not exceed half a pint in the quantity of fluid, nor six months from their first appearance.

On a former occasion, in a small tract on the treatment of strictures, I mentioned the case of a gentleman, in whom the operation of injection produced sensations in the urethra that led to the discovery of strictures. He lately

applied to me with a hydrocele in the other testicle, and brought with him Mr. R.'s treatise, which he had been studying with attention, and was desirous of an attempt at curing the hydrocele by means of bougies; accordingly one was passed to ascertain the state of the urethra, which went into the bladder without pain or difficulty. At his request it was continued a fortnight, when not finding any diminution of the tumor, he consented to have it injected, and by his own wish a glass of wine, put into a pint of water, was injected; this gave him hardly any pain, and I proposed increasing the strength of the injection by the addition of more wine; but he preferred letting it remain longer than usual, and at the end of twenty minutes it was evacuated, without any apparent irritation, or alteration in the part, and with so little inconvenience, that he dined with a friend in a coffee house. On the following, day however, the scrotum had acquired a degree of fulness, that indicated a return of fluid, but not enough to be manifest by transparency. The next day it had enlarged as much as before the operation, and on placing a candle behind it, the transparency was visible. In this state it remained several days, without any pain, nevertheless, with sufficient tenderness in the part, to make him cautious not to increase it. At the end of three weeks it had decidedly lessened, and from that time continued to decrease, till it had acquired its natural size.

No age is exempt from this disease. Mr. Rowland, of

Chester, cured a child of five months old, by seton. Mr. Dease, one of the same age, by lapis infernalis. The youngest patient on whom the injection was used, in Sir James Earle's Treatise, was a boy nine years of age (Case XXXI). It is however very seldom necessary to resort to any operation in very young children; external applications being generally sufficient.

Wiseman and others have recommended, that hydrocele should not be punctured, when it contains less than a pint; but in my opinion it is a consideration of much practical importance, to let out the fluid, as soon as it can be effected with safety. There is a greater probability of its not returning. While the membranes retain their original texture the absorbents are more likely to do their duty; and it may prevent the irritation which is sometimes occasioned by the pressure of fluid on the surface of the testicle.

In all cases of sudden effusion, it may be done with advantage by a lancet, when the trochar would perhaps be hazardous. I remember an instance of this kind, in a patient of Sir James Earle's, who was of a remarkably nervous temperament. He had the operation done for a small hydrocele of the spermatic chord, which got well in the usual time, but was immediately succeeded by a hydrocele of the tunica vaginalis, which was let out by a trochar at the end of a fortnight, and did not return. Mr. Pott

mentions two cases of a somewhat similar nature. And a patient of mine lately shewed me a hydrocele, which contained half a pint of fluid, attributed to a blow he received on the testicle in getting over a stile, five weeks before. It was evacuated by puncturing with a lancet, and has not returned since.

It should, I think, always be presumed, that cases of hydrocele accompanied with a disordered state of urethra, may be cured by bougies alone; and as this is a condition of frequent occurrence, we may so far, at least as applies to this descripton of case, agree with Mr. Ramsden's affirmation, that " the cure of the true hydrocele, may be radically obtained with little pain and without any greater sacrifice, than a few days restriction from business and the common habits of society."

PLATE XVII.

REPRESENTS the tunica vaginalis testis, laid open in a common hydrocele, containing about half a pint of fluid.

In this person there had been hydrocele of both testicles; one was cured by injection, and the operation for the other, was deferred on account of the appearance of the fluid, which was tinged with blood the first time it was tapped, and subsequently, from a similar cause, it had the appearance of coffee, a circumstance not uncommon, but sufficient to render a postponement of the operation adviseable. At subsequent tappings, the appearance of the fluid was sufficiently limpid, but was not injected, on account of the patient's ill health, and his having recently undergone a course of mercury, which I once knew produce great irritation and locked-jaw.

PLATE XVIII.

Exhibits two cysts, containing fluid, which were formed in the cellular substance of the scrotum, exterior to the testicle and tunica vaginalis.

The patient being supposed of a dropsical habit, attempts had been made to cure him by purging. This process is indeed authorised by Heister, who gives several receipts of purging wines, for the cure of Hydrocele. One of these prescriptions, consists of ten or twelve ingredients. I cannot, however, recommend his plan by the present case, as the poor sufferer was so much reduced, that it was with difficulty he could be restored. In these days it cannot be necessary to combat Heister's theories, any more than the sage proposal of a French writer of the sixteenth century, who recommends the cautery, as " le plus utile, parce qu'il consume les eaux."

PLATE XIX.

An enormously distended scrotum, containing a diseased testicle and hernia. The extremity of the prepuce forms a sort of navel on the anterior surface, from which the urine flowed.

The man was fifty-two years of age, and had been under the care of a medical friend of mine in Essex. Notwithstanding the complication of diseases, the hydrocele had been twice tapped, and relieved of four pints of fluid. The last operation was after an interval of two years, and though no ill consequences followed, the testicle was found so much enlarged, as to render any future attempt hazardous.

Sir James Earle mentions a case, in which the tunica vaginalis contained six pints, which is much more considerable than any other on record. The figure and appearance represented, though a curiosity here, is by no means uncommon in the West Indies.

HERNIA CONGENITA.

THE discovery of the hernia congenita is due almost to our own times, for highly as we may estimate the industry of the ancients, it must be admitted that the whole of this intricate complaint was entirely unknown to them. Like most other discoveries, it was progressive; and like most others in which Mr. Hunter has been engaged, it has remained as he left it.

Mr. Samuel Sharp was the first person who remarked an hernia, in which the testicle was found in contact with the gut, or, as it was then expressed, included in one sack. Baron Haller and Mr. Pott about the same time, endeavoured to account for this, by remarking that the original seat of the testicle is in the abdomen. Both conceived that it did not reach the scrotum till after birth, in consequence of which, that the gut was very liable to come down with it. Had this been really the

case, the disease must have been not only common, but, without some unknown provision, almost universal.

It was reserved for the talents of Mr. J. Hunter to unravel this mystery; and, in my opinion, there does not exist in the whole history of anatomical research, a discovery which does greater honour to the author. It should be recollected that no common subjects of dissection could afford any information. The inquiry was confined to male children of premature birth, and it was even necessary to examine these at various periods of utero-gestation. All this, however, was accomplished by a young man, till then scarcely known to the world, and in such a manner as to gain the acknowledgment of a veteran,* whose name resounded through Europe, who was engaged in the same research, not only at the same time, but for several months before him.

This subject is so accurately detailed by Mr. Hunter, in his account of the "situation of the testis in the fœtus," that I shall only refer the reader to that paper. There is, however, one passage which equally marks his genius, his industry, and his modesty, yet I do not recollect that it has been noticed by any subsequent writer. Even Mr. Lawrence, in his valuable treatise, in which he has given a long and ingenious chapter on Hernia

* Haller.

congenita, has, I believe, left it unnoticed; I mean the comparatively small size of the testicle, when found in contact with the gut. Mr. Pott speaks of the testicle as wasted, which subsequent writers have considered as the effect of absorption from the pressure of the gut; but the pressure is not much greater than in common hernia: besides which, the diminutive size of the testis will be found at an age, when the pressure must have been of much shorter duration than in others, where the testicles retain the natural size.

The following are Mr. Hunter's words, " It is not easy to ascertain the cause of this failure in the descent of the testicle; but I am inclined to suspect that the fault originates in the testicles themselves; it is however certain that the testicle which has compleated its descent, is the largest, which is more evident in the quadruped than in the human subject; as in these we can have an opportunity of examining the parts when we please, and can determine how small, in comparison with the other, that testicle is which has exceeded the usual time of coming down; it never descends so low as the other."

The above consideration, added to the condition of the parts in hernia congenita, very much confirm Mr. Hunter's opinion, that the detention of the testicle, arises from an imperfection in the gland itself.

The cases here represented, the only two of which I have taken drawings, are sufficient to illustrate the subject. And in every other case of hernia congenita, which has occurred to me, the diminutive size, and flabby texture of the testis, afford the presumption of defective organization, a circumstance of little consequence to the subject, when only one testicle is in this condition.

A rupture may have the true congenital character, though it does not make its appearance till the age of puberty, or even manhood. It frequently happens that the testicle is in its progress downwards, and arrives at the groin at the age of fourteen or fifteen. At this time, even if the testicle descends by itself, a rupture is sometimes suspected, and attributed to exertion during some juvenile sport. Nothing can be more unpardonable in a Surgeon, than a negligent examination of a part submitted to him. Under circumstances of hernia at all complicated, at any age, but particularly about the period above mentioned, the scrotum should always be examined, and any preternatural situation of the testicle, will be instantly detected. It should be recollected too, that the discovery will redound much to the credit of the examiner, who will have the reputation of discovering what was before, perhaps, kept a profound secret.

PLATE XX.

These preparations are selected from many others, as they represent an appearance of the testicle in hernia congenita not unusual, but I have thought not sufficiently noticed.

The subject of the first at about forty years of age was killed by falling from the roof of a house, and in examining the body, this rupture was discovered. In this kind of hernia, adhesions are particularly numerous, and usually elongated; which is easily accounted for when we reflect, that the testicle, in its passage, is not to be considered as moving loosely between the intestines, but every where attached to those parts with which it is in contact. This readily explains that appearance of the intestine adhering to the testicle, in some places, by firm fibrous bands, such as are seen in the upper part of the sac, spreading over the spermatic chord.

The frequent occurrence of these adhesions explains also the difficulty so frequently met with in reducing such herniæ; and that very difficulty should always remind the Surgeon of the probability of such a cause.

PLATE XXI.

Exhibits appearances of a hernia congenita in a man fifty-two years of age, who died of a compound fracture of the leg. In the early part of his life, and in the country where he resided, he was considered a curiosity, as a boy with one testicle. Notwithstanding this, when at the age of about fourteen years, a tumor appeared in the groin, it was treated as a bubo. When it afterwards reached the scrotum, the country doctor, who was acquainted with the peculiarity of his formation, told him it was a common rupture, and applied a truss, nor was it till he came to London many years after, that he was informed he had a second testicle. He married at thirty-six years of age, and left a family of three children.

HAVING remarked that the congenital hernia is a discovery of modern times, and having in the present inquiry, referred in a very general manner to most of what has been written on the subject, I cannot withhold from the reader the interest I felt from one part of the controversy between Mr. Pott and Dr. W. Hunter. Mr. Pott, in his otherwise elegantly written performance, uses the word congenial hernia. It surprized me much, that so improper a term should have passed unnoticed during the heat of the controversy, and even till Mr. Laurence published his valuable and comprehensive Prize Essay in 1807, in which, with little ceremony to a name, the just pride of St. Bartholomew's, he calls the term adopted by Mr. Pott, "*perfectly absurd*, as applied to this or any other rupture."

The use of the term is, however, very neatly accounted for, but by no means defended, in a candid review of Mr. Laurence's Work, in the 19th Vol. of the Medical and Physical Journal. Since that time Mr. Laurence has published a second edition, in which he expresses the same surprize. This shews that the perusal of periodical works ought not to be considered as mere frivolous employment; they often furnish the means of

information beyond the most laborious research: for though the present question may seem unimportant, yet, as a fact, it is valuable, and may lead to others much more so.

THE END.

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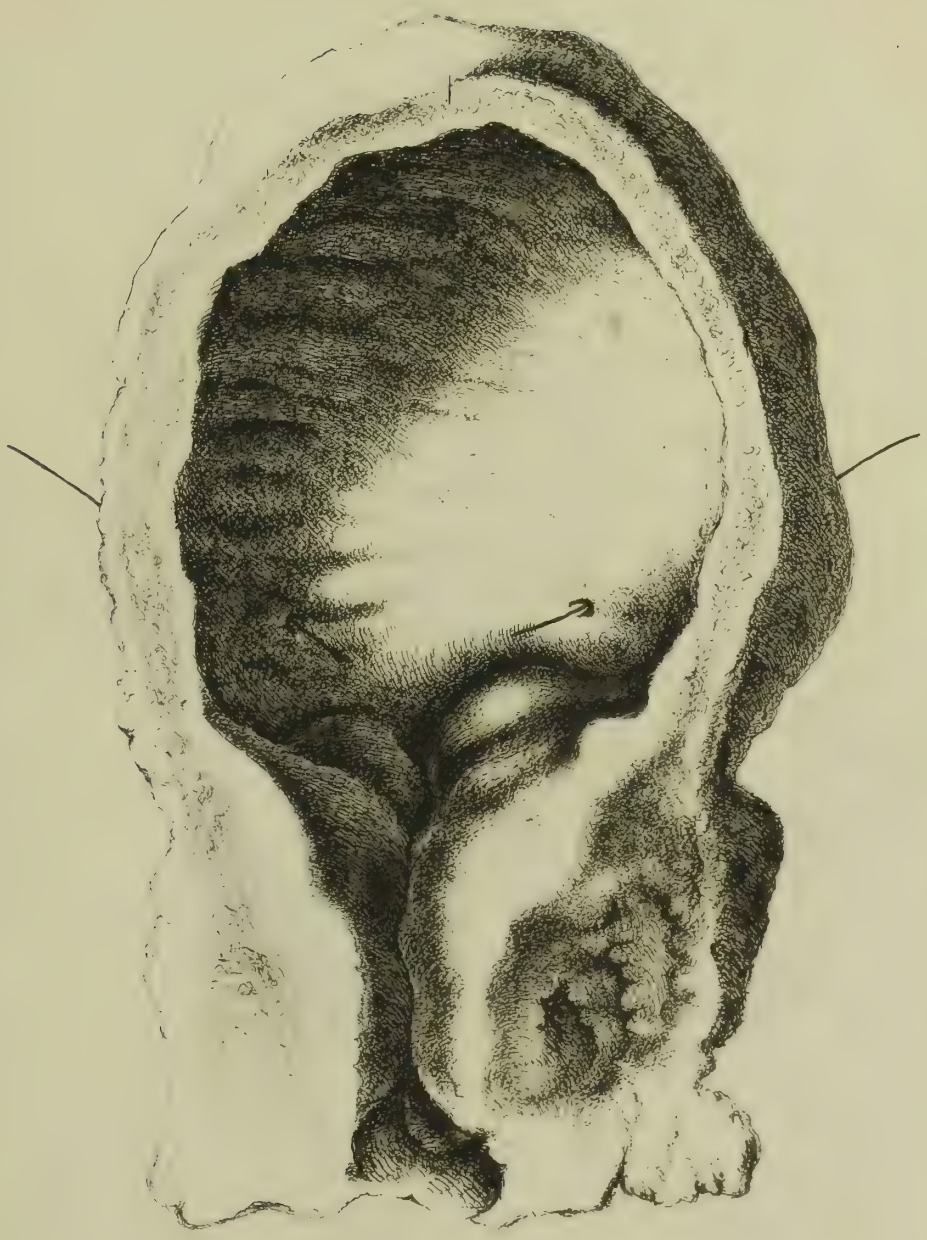
W Wadd f. 1815

Plate V

W Wadd f. 1815

W. Wadd. f. 1815



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W Wadd f. 1815

Plate IX

W Wadd f. 1815

Plate X.

W Wadd.f 1815

Plate XI

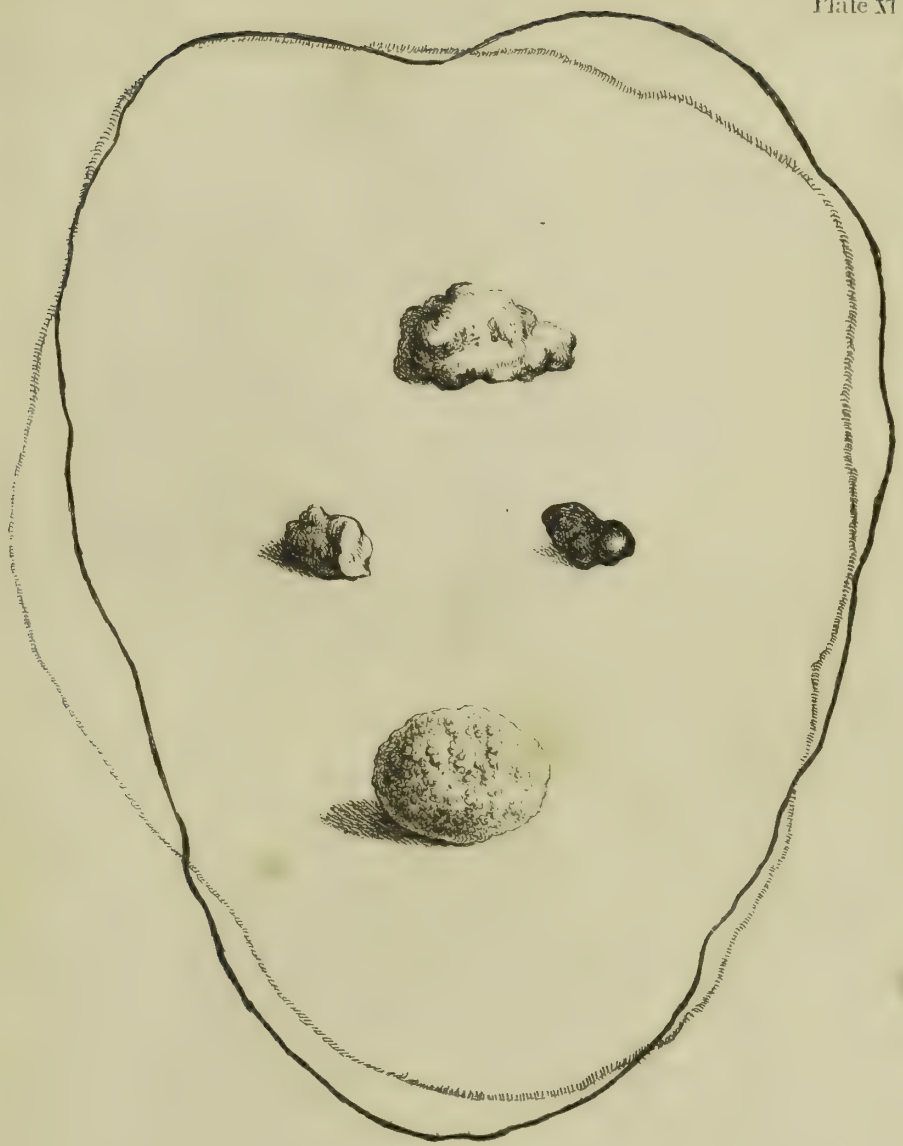
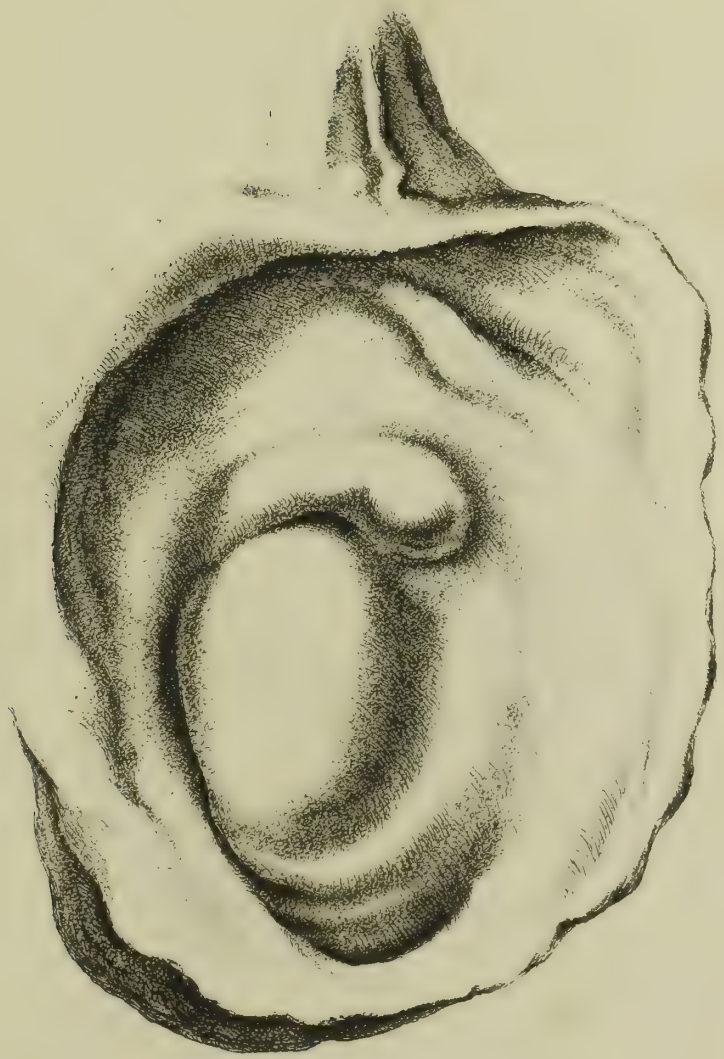
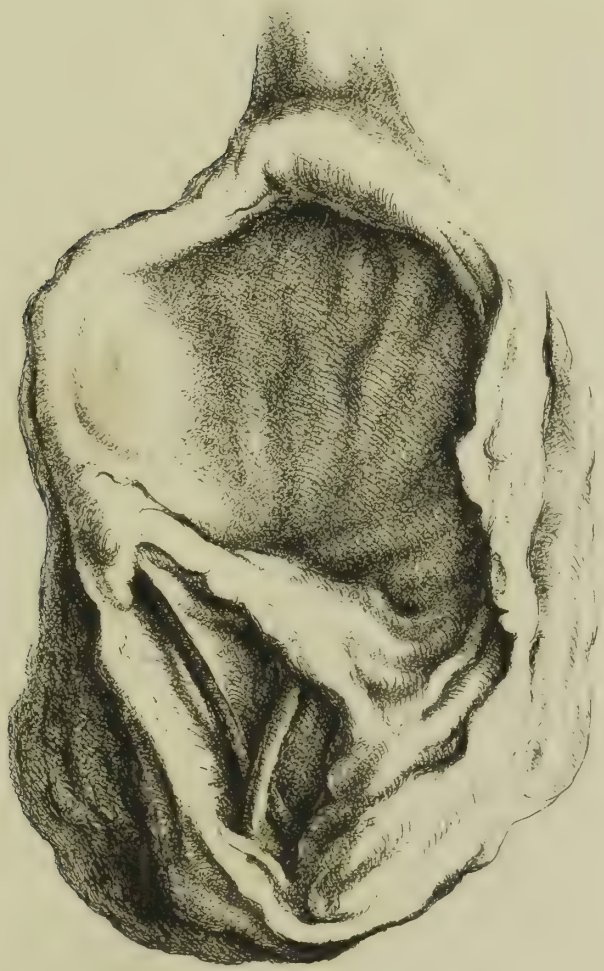


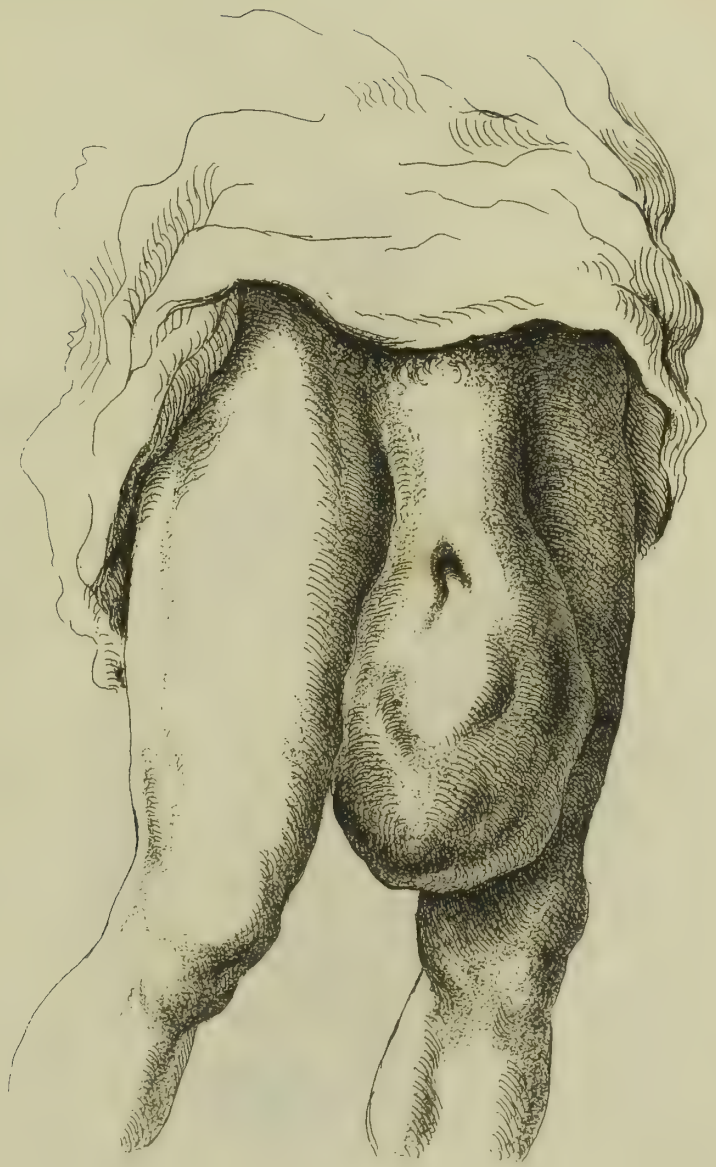
Plate XII

W. Wadd. f. 1813

Plate XIII







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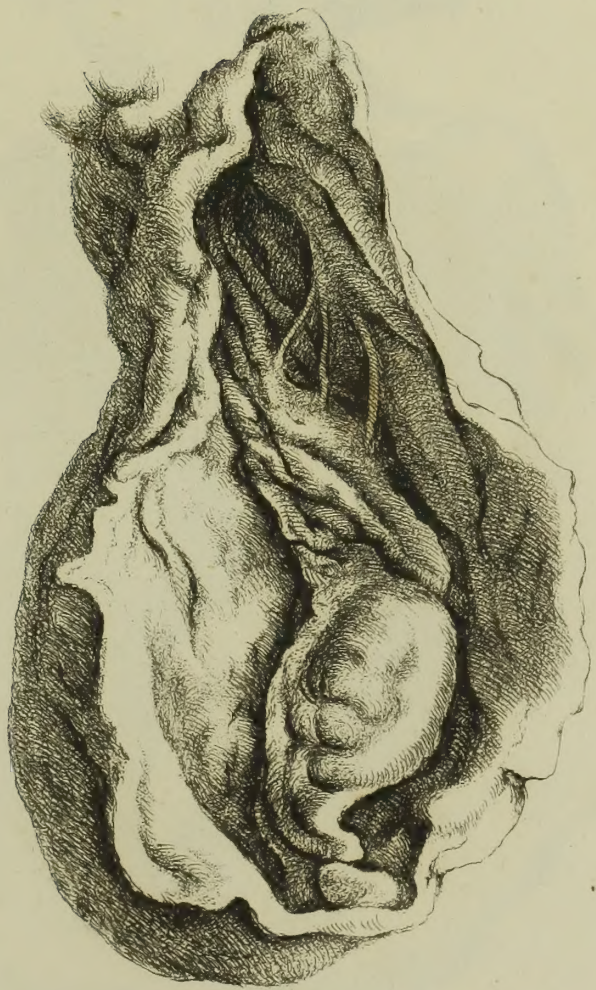

W Wadd. f. 1815.

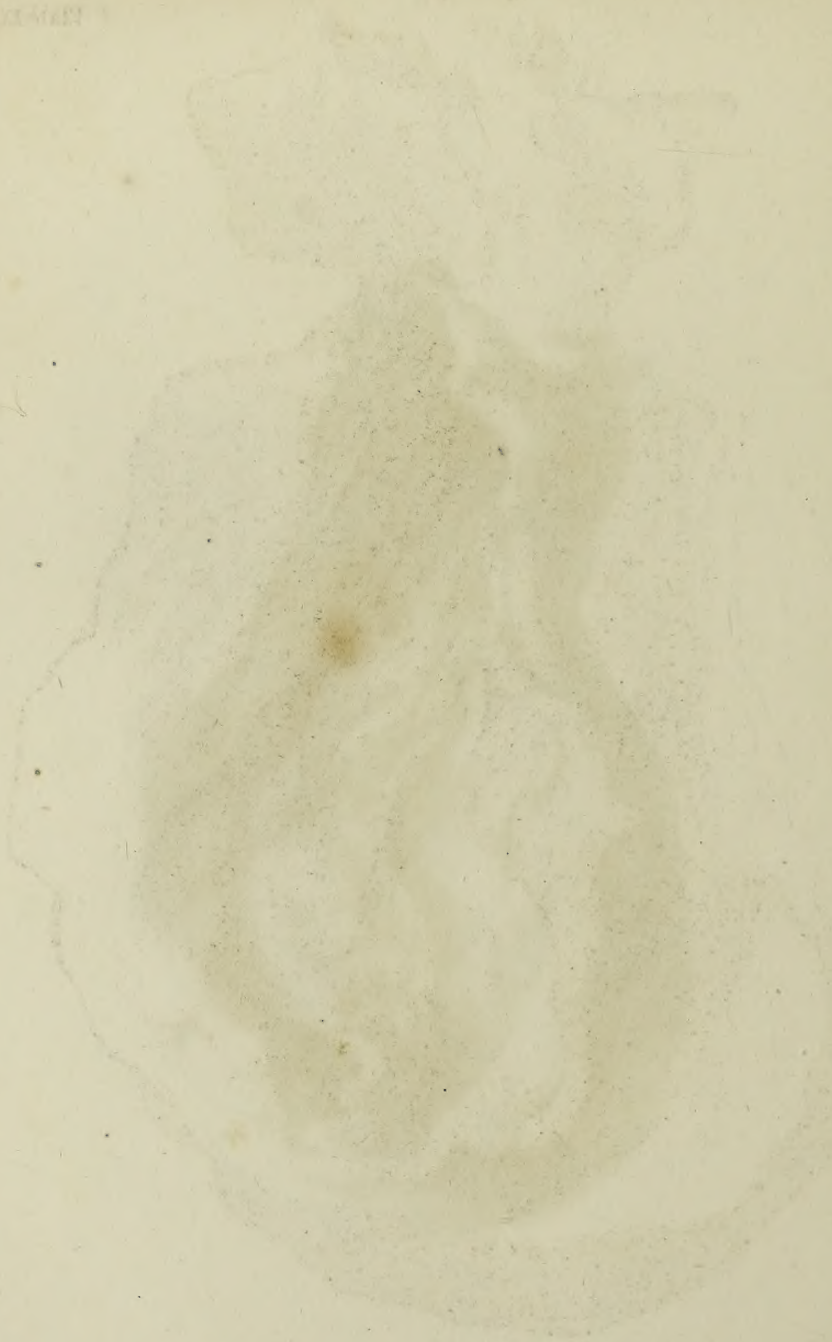

Plate XXI

W. Wadd f. 1815